

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

**Applicants:** Roland Contreras, et al.      **Examiner:** Quang Nguyen

**Serial No.:** 10/672,484      **Art Unit:** 1633

**Filed:** September 25, 2003      **Docket:** 13748Z

**For:** PROTEIN GLYCOSYLATION  
MODIFICATION IN METHYLOTROPHIC  
YEAST      **Dated:** November 11, 2009

**Confirmation No.:** 8325

Commissioner for Patents  
P. O. Box 1450  
Alexandria, VA 22313-1450

**INFORMATION DISCLOSURE STATEMENT**

Sir:

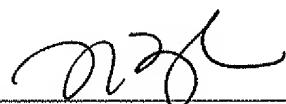
In accordance with 37 C.F.R. §§1.97 and 1.98, it is requested that the following references, which are also listed on the attached Form PTO-1449, be made of record in the above-identified case.

1. Notice of Opposition of European Patent No. 1 294 910 B1, dated September 24, 2009, enclosing an Opposition filed by Merck & Co., Inc. and an Opposition filed by Wacker Chemie AG, together with an English-language translation;
2. European Patent Publication No. EP 1 297 172 B1, published April 2, 2003;
3. Cereghino J.L. et al., "Heterologous Protein Expression in the Methylotrophic Yeast *Pichia Pastoris*", *FEMS Microbiology Reviews* 24:45-66 (2000);

**CERTIFICATE OF ELECTRONIC FILING**

I hereby certify that this correspondence is being deposited with the United States Patent & Trademark Office via Electronic Filing through the United States Patent and Trademark Office e-business website.

Dated: November 11, 2009



Xiaochun Zhu

4. Herscovics A., "Processing Glycosidases of *Saccharomyces Cerevisiae*", *Biochimica et Biophysica Acta* 1426:275-285 (1999);
5. Kang H.A. et al., "Glycosylation of Human  $\alpha_1$ -Antitrypsin in *Saccharomyces Cerevisiae* and Methylotrophic Yeasts", *Yeast* 14:371-381 (1998);
6. Tremblay L.O. et al., "Molecular Cloning, Chromosomal Mapping and Tissue-Specific Expression of a Novel Human  $\alpha$ 1,2-Mannosidase Gene Involved in N-Glycan Maturation", *Glycobiology* 8:585-595 (1998);
7. Malissard M. et al., "The Yeast Expression System for Recombinant Glycosyltransferases", *Glycoconjugate Journal* 16:125-139 (1999);
8. Nagasu T. et al., "Isolation of New Temperature-Sensitive Mutants of *Saccharomyces Cerevisiae* Deficient in Mannose Outer Chain Elongation", *Yeast* 8:535-547 (1992);
9. Vervecken W. et al., "In Vivo Synthesis of Mammalian-Like, Hybrid-Type N-Glycans in *Pichia Pastoris*", *Applied and Environmental Microbiology* 70(5):2639-2646 (2004);
10. Trimble R.B. et al., "Structure of Oligosaccharides on *Saccharomyces SUC2* Invertase Secreted by the Methylotrophic Yeast *Pichia Pastoris*", *The Journal of Biological Chemistry* 266(34):22807-22817 (1991);
11. Verostek M.F. et al., "Mannosyltransferase Activities in Membranes from Various Yeast Strains", *Glycobiology* 5(7):671-681 (1995);
12. Japanese Patent Application No. 9-261, dated January 7, 1997, together with an English-language abstract;
13. Pelham H.R.B. et al., "Sorting of Soluble ER Proteins in Yeast", *The EMBO Journal* 7(6):1757-1762 (1988);
14. PCT International Patent Publication No. WO 2004/003205 A1, published January 8, 2004;
15. Blandin G. et al., "Genomic Exploration of the Hemiascomycetous Yeasts: 13. *Pichia Angusta*", *FEBS Letter* 487:76-81 (2000);
16. Kim M.W. et al., "Functional Characterization of the *Hansenula Polymorpha HOCl*, *OCH1*, and *OCRI* Genes as Members of the Yeast *OCH1* Mannosyltransferase Family Involved in Protein Glycosylation", *The Journal of Biological Chemistry* 281(10):6261-6272 (2006);

17. Ramezani-Rad M. et al., "The *Hansenula Polymorpha* (strain CBS4732) Genome Sequencing and Analysis", *FEMS Yeast Research* 4:207-215 (2003); and
18. Alani E. et al., "A Method for Gene Disruption that Allows Repeated Use of *URA3* Selection in the Construction of Multiply Disrupted Yeast Strains", *Genetics* 116:541-545 (1987).

References 2-8 were cited in the Opposition filed by Merck & Co., Inc., and References 8-18 were cited in the Opposition filed by Wacker Chemie AG. Applicants are submitting copies of the above-cited references required by 37 C.F.R. §1.98 (a)(2)(i) and (ii). The relevance of the above-identified references has been described in the Oppositions.

It is further respectfully submitted that all of the other references cited in the Oppositions were already cited in Applicants' previous Information Disclosure Statements, and therefore they are not listed in the instant IDS or the attached PTO-1449 form. Specifically, JP 8-336387 and Maras M. et al. (2000), cited in the Opposition filed by Merck, were previously submitted in Applicants' Information Disclosure Statement dated September 25, 2003; and WO 02/00879 A2, WO 96/21038, Nakayama Ken-ichi et al. (1992), Lehle L. et al. (1995) and Lai A. et al. (1998), also cited in the Opposition filed by Merck, were previously submitted in an IDS dated July 8, 2009. Chiba Y. et al. (1998), Nakanishi-Shindo Y. et al., (1993) and Martinet W. et al., (1998), which were cited in both Oppositions, were previously submitted in an IDS dated September 25, 2003.

The undersigned attorney hereby states that each item of information contained in this Information Disclosure Statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this Information Disclosure Statement.

Respectfully submitted,



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